

PREFLIGHT AND POSTFLIGHT INSPECTION

ARTICLE NO 356 MISSION NO 4020 DATE 18 Mar 57

PRE MECH PO MECH

NOSE SECTION:

\*1. Plastic nose & windows free of cracks & secure.

2. ARN/6 boot for condition & closed, ARN/6 and compass secure.

3. Brake fluid for proper level & cap secure.

4. Cabin pressure test fitting secure.

5. Pitot clean & secure, check AIRSPEED.

6. Nose section clean & OK to close pannel.

7. Access panel installed.

8. All items cleared.

CREW CHIEF:

AUTOPILOT:

1. Power on.

2. Inverter on.

3. After 3 minutes turn autopilot on. (Stick should not move fore or aft.)

4. Check roll trim knob for operation. Wheel should move approximately the same distance each direction.

5. Check yaw trim knob for operation.

6. Check pitch trim knob for operation.

7. Check turn knob for operation.

8. Overpower autopilot in all three axes. (Stick and rudder pedals should return smoothly to initial position).

9. Center yaw and roll trim knobs.

10. Inverter off.

11. Power off.

12. All items cleared.

AUTOPILOT CHIEF:

PRE MECH PO MECH

SEXTANT:		
1. Lighting, DAY, NIGHT and OFF.		
2. AZIMUTH control movement, 360° both ways.		
3. HEADING control movement, four rotations.		
4. ELEVATION control movement, high and low, visibility of objects.		
5. Averager time.		
6. Bubble diameter.		
7. Average error.		
8. Standard control settings.		
9. Light cone stowed. Cleanliness of optics.		
10. Leave light switch in off position. Turn off rectifier and remove plug from ship.		
11. All items cleared.	SEXTANT CHIEF:	
COCKPIT EXTERNAL:		
1. Static holes all open.		
2. Canopy external handle secure.		
3. Lower antenna secure.		
4. Windshield & canopy glass cleanliness & condition.		
5. All items cleared.	CREW CHIEF:	
COCKPIT INTERNAL:		
1. Canopy emergency release handle locked & safetied (020 copper wire).		
2. Canopy for proper latching with aft hatch installed.		
3. Canopy seal & connection for condition.		
4. Brakes for solid feel.		
5. Approved For Release 2000/09/14 : CIA-RDP89B00551R000600330051-3		
6. Elevator for operation & freedom.		

PRE MECH PO MECH

## COCKPIT INTERNAL: (Continued)

- |   |                |
|---|----------------|
| 7. Aileron for operation & freedom.   | LFB            |
| 8. Elevator tab for operation & direction. Set to neutral.                                    | LFB            |
| 9. Aileron tab for operation & direction. Set to neutral.                                     | LFB            |
| 10. Throttle for operation & friction lock.   | LFB            |
| 11. U.H.F.  | fore me.<br>FM |
| 12. Rag in map case.  | LFB            |
| 13. Instruments for condition & cleanliness.  | LFB            |
| 14. Circuit breakers set or into white line.  | LFB            |
| 15. Seat belt & shoulder straps for condition & operation.                                    | LFB            |
| 16. Oxygen system checked out, system pressure 1800-2000# cap installed, check out face heat. | LFB            |
| 17. Warning lights for operation.   | DM             |
| 18. Seat for condition & operation.   | LFB            |
| 19. Interior lights for operation & security.   | LFB            |
| 20. Cockpit floor cleaned.  | DM             |

21. All items cleared.

CREW CHIEF:

## EQUIPMENT BAY:

- |  |     |
|--|-----|
| *1. Accelerometer, checked & set.                                      | LFB |
| 2. Peacan drained, flushed & valve closed.                             | LFB |
| 3. Cockpit regulators for cleanliness & condition.                     | LFB |
| 4. Control cables for freedom, operation & turnbarrels safeties.       | LFB |
| 5. Equipment for security in hatch & bay.                              | LFB |
| 6. Lower hatch & seal for operation & condition of latching mechanism. | DM  |
| 7. OK to install lower hatch.  | DM  |

PRE MECH PO MECH

EQUIPMENT BAY: (Continued)		
9. Check HF radio equipment for security.		<i>LB</i>
10. Upper hatch latching mechanism for operations.		<i>LB</i>
11. Pressure regulator safetied in flight position.		<i>LB</i>
12. OK to install upper hatch.		<i>LB</i>
13. Upper hatch installed, latched and safetied.		<i>LB</i>
14. Battery for operation, check voltage with precision meter.		<i>LB</i>
15. All items cleared.	CREW CHIEF:	
UPPER CROTCH BAY:		
1. Heat exchanger duct connections for security.		<i>AR</i>
2. Check for plumbing or anything riding structure.		<i>AR</i>
3. OK to close access door.		<i>AR</i>
4. Access door closed and secure.		<i>AR</i>
5. All items cleared.	CREW CHIEF:	
ENGINE AIR DUCTS:		
1. R/H & L/H main ducts for cracks & cleanliness.		<i>AR</i>
2. R/H oil cooler duct for cracks & cleanliness.		<i>AR</i>
3. Check inlet guide vanes, compressor rotor & stator blades for dents, nicks or other evidence that the engine has ingested foreign material.		<i>AR</i>
4. Run up screens removed.		<i>LB</i>
5. All items cleared.	CREW CHIEF:	
WING:		
1. R/H wing for condition & cover plates secured.		<i>LB</i>
2. R/H Aileron & tab for security & condition.		<i>LB</i>
3. R/H flap for security & condition.		<i>LB</i>
4. R/H fuel caps secured.		<i>LB</i>

PRE MECH PO MECH

WING: (Continued)

5. R/H. wing fillets for conditions & security.
6. R/H pogo installed & latched.
7. L/H wing for condition & cover plates secured.
8. L/H aileron & tab for security & condition.
9. L/H flap for security & condition.
10. L/H fuel caps secured.
11. L/H wing fillets for condition & security.
12. L/H pogo installed & latched.
13. L/H & R/H outboard fuel drain valves checked for water.
14. All items cleared. CREW CHIEF:

XLB  
XLB  
XLB  
XLB  
XLB  
XLB  
XLB  
XLB  
XLB

FUSELAGE:

1. External skin for condition.
2. Ejector for condition.
3. Dive flap (speed brakes) for condition & hydro leaks.
4. All cover plates secured on top of fuselage.
- \*5. Tail pipe & turbine for cracks or evidence of foreign material passing through turbine.
6. All items cleared. CREW CHIEF:

XLB  
XLB  
R.  
R  
XLB  
PH

EMPENNAGE:

1. Stabilizer for condition.
2. Elevator & tab for condition & security.
3. Elevator tab for servo action.
4. Vertical stabilizer for condition.
5. Vent line open.
6. Rudder for security & condition.

XLB  
XLB  
XLB  
XLB  
XLB  
XLB

PRE MECH PO MECH

EMPENNAGE: (Continued)

7. Fillets for security & condition.

8. All items cleared.

CREW CHIEF:

TAIL GEAR:

1. Doors for security.

2. Tires for condition.

3. Steering cables & brackets for condition & security.

4. Strut for condition & cleanliness, proper pressure is 335 PSI extended or 3.75 inches compressed.

5. Micro switch for security & condition.

6. All items cleared.

CREW CHIEF:

MAIN GEAR & WELL:

1. Door for security & condition.

2. Control cables for condition, turnbarrels safetied.

3. Uplock release cable & spring secure.

4. Retract mechanism & cyl. for condition.

5. Strut for condition, proper pressure or height & cleanliness. Pressure 180 PSI extended or 4.5 inches compressed.

6. Brakes for clearance & freedom of leaks.

\*7. Tires for condition & pressure, 240 lbs.

8. Canopy antenna connection secure.

9. All items cleared.

CREW CHIEF:

ENGINE COMPARTMENT:

1. Throttle for security & safety.

2. Main & aux. fuel tank transfer valves open & safetied.

3. Chip catcher serviced.

4. Main fuel strainer drained or checked for water.

PRE MECH PO MECH

ENGINE COMPARTMENT: (Continued)

5. Check accumulator pressure, 800 PSI.

AR.

6. Hydro oil tank full.

LFB

7. Electrical plugs secure & safetied.

AR.

8. Fuel & oil lines secure & free of leaks.

AR.

9. Dive flap shut off valve safetied open.

LFB

10. Engine side plates installed.

LFB

11. OK to install aft lower engine cover & drain lines.

AR.

12. Engine mounts & tail pipe for security.

LFB

13. All items cleared.

CREW CHIEF:

LFB

FINAL SIGN OFF:

1. Install ower engine cover fwd. section.

LFB

2. Remove pitot airspeed cover.

LFB

3. Remove main & tail gear down lock pins.

LFB

4. Install scissors pin in tail gear.

AR

5. Fuel load 1335 Fuel added 1162 oil added 0

Oil level 8 3/4 Oxygen 1950

6. Ship released for flight LFB Date 12 Mar 57

Time 05:15

1. Each item on PRE will be initialed on preflight.
2. Items deemed necessary will be initialed on postflight.
3. \*Indicates a must of postflight.

## ENGINE RUN DATA

DATE 17 Mar 57 TEST \_\_\_\_\_ ARTICLE \_\_\_\_\_ OPERATION \_\_\_\_\_  
 START 13:03 START 14:41 START \_\_\_\_\_ START \_\_\_\_\_  
 STOP 13:19 STOP 14:47 STOP \_\_\_\_\_ STOP \_\_\_\_\_

TIME						
RPM Idle 50 Max. 91-95	50					
JET TEMP. Idle 200-300 Max. 500-580	290					
FUEL PRESS. Idle 15-20 Max. 8-12	17.5					
START TOTALIZER	636	590				
END TOTALIZER	590	574				
ELAPSED TIME	16 min	6 min				
LOADMETER .05-2.5	.05					
HYDRO. PRESS. 2800-3100	2900					
OIL PRESS. 40-50	43					
PRESS. RATIO 80% 1.2-1.6 Max. 2.2-2.5	1.33					
WING FLAPS-GUST	ON					
DIVE BRAKES-CLOSED	ON					
AIR COND. CHECKED	ON					